

Proposal for a National Spatial Data Infrastructure Standards Project

PROJECT TITLE: FGDC Profile(s) of the ISO Technical Committee 211 Metadata Standard (ISO 19115)

DATE OF PROPOSAL: June 13, 2001

TYPE OF STANDARD: Data Usability Standard – FGDC Profile(s) of ISO 19115.

SUBMITTING ORGANIZATION: FGDC Metadata Staff Coordinator.

POINT OF CONTACT: Richard A. Pearsall, email: rpearsall@usgs.gov.

OBJECTIVES: To create implementable subsets and extensions of ISO 19115-Geographic Information/Metadata as defined by that standard so that conversion of FGDC support tools, and implementations to meet ISO conformance requirements is facilitated and to maintain, to the greatest extent, harmony between ISO and FGDC geospatial metadata.

SCOPE: The development of FGDC metadata profiles that conform to the ISO 19115 Metadata standard. The metadata profiles presently being proposed are (1) a profile of ISO 19115 that is harmonized and consistent with FGDC-STD-001-1998 and (2) a profile that fully incorporates the richness and fullness of ISO 19115. Profile 1 will ensure existing FGDC metadata records can be migrated that conform to ISO 19115 while Profile 2 will enable metadata producers to fully exploit and metadata users to fully utilize the richness of ISO 19115. It is important to note that ISO 19115 has numerous metadata entities and attributes that are presently deficient in FGDC-STD-001-1998. During the course of development of these profiles, it may be determined that additional profiles are necessary to fully meet the NSDI metadata requirements.

JUSTIFICATION: Metadata is one of the 4 National Spatial Data Infrastructure concepts outlined in the Executive Order 12906. Metadata is also one of the key components of the Global Spatial Data Infrastructure. Metadata serves numerous purposes such as protecting an organizations data collection investment, preserving the longevity and value of data, protecting institutional knowledge, enabling data shareability, and preserving and protecting liability.

Since 1997, the FGDC has been actively involved on the ISO TC211 Metadata project team to develop an International Geospatial Metadata Standard (known as ISO 19115). During this development, the FGDC has sought to harmonize the existing FGDC Content Standard for Digital Geospatial Metadata (CSDGM), official known as FGDC-STD-001-

1998, with ISO 19115. This harmonization has been widely publicized at the FGDC web site and at numerous National and Regional geospatial data conferences. A primary premise of the ISO TC211 family of standards is the concept of Profiles where national bodies or liaison organizations are encouraged to develop Profiles of the ISO TC211 standards. This effort is an important step in maintaining the FGDC/ISO metadata harmonization.

BENEFITS: The Standard will benefit Federal, State, local and Tribal governments and other participants in a global environment interested in sharing and exchanging geospatially referenced data sets by encouraging the production and use of metadata that is compliant, as a profile, with an International Metadata Standard. Metadata that conforms to ISO 19115 (as profiles) will enable FGDC Partners to partner with international organizations and share data (and metadata) developed by these international organizations.

APPROACH: The FGDC Metadata Coordinator will work closely with the Standards Working Group (SWG) to ensure the standard developed conforms to the FGDC Standards Process. FGDC Partners and individuals and organizations outside the FGDC will be notified of the profile(s) development and encouraged to participate. FGDC may financially subsidize certain organizations to ensure the broadest participation in the profile development. It is anticipated that approximately 2-3 face-to-face meetings will be held of the participating individuals. The FGDC web page and collaborative computing applications (i.e. Quickplace, netmeeting, ...) will be used when appropriate to ensure good committee participation and discussion. Presentations will be made at major geospatial conferences to solicit participation and keep the United States geospatial community informed of this standards development project. In addition to the standard notifications of this proposal by the Chair of the FGDC Standards Working Group, announcement of this activity will also be made on numerous Listserves related to the geospatial sciences.

DEVELOPMENT AND COMPLETION SCHEDULE:

Proposal approved: June 2001
First Draft: October 2001
Final Draft: December 2001
FGDC Endorsement: April 2002

RESOURCES REQUIRED: United States Metadata Subject Area Experts from the Federal, State, Local, Tribal, and Private sectors. FGDC funds may be used to help form financial assistance to ensure the broadest participation. Existing FGDC Staff resources are available and may be used to assist in specific tasks such as but limited to information dissemination and meeting planning.

The process will be open and will include members of the FGDC Metadata AdHoc Committee, organizational partners of the NSDI, and any US organization that is willing to participate.

RELATED STANDARDS: The following metadata standards have been identified to date:

FGDC-STD-001-1998, Content Standard for Digital Geospatial Metadata, Federal Geographic Data Committee, June 1998.

ISO/TC211 Geographic Information/Geomatics, ISO 19115 Draft International Standard (ISO/TC 211 N1024). Other ISO TC211 Standards (such as Quality, Encoding, Profiles, Spatial and Temporal Representation) will be referenced and used as necessary.

FGDC-STD-001.X-YYYY, any profile(s) (endorsed or under development - to include but not limited to the Biological Profile, the Shoreline Profile, and the Remote sensing Profile) of the FGDC Content Standard for Digital Geospatial Metadata.

TARGET AUTHORIZATION BODY: The FGDC will serve as the initial Target Authorization Body. The FGDC will strive to conform to the American National Standards Institute rules and guidelines to facilitate the possibility of any FGDC Profile being adopted as an American National Standard. NCITS L1 will be briefed on the FGDC activity so that they can consider the possibility of parallel select profiles as American National Standards.